Microsoft

Azure Developer Community Call

Azure Container Apps - Ask me Anything
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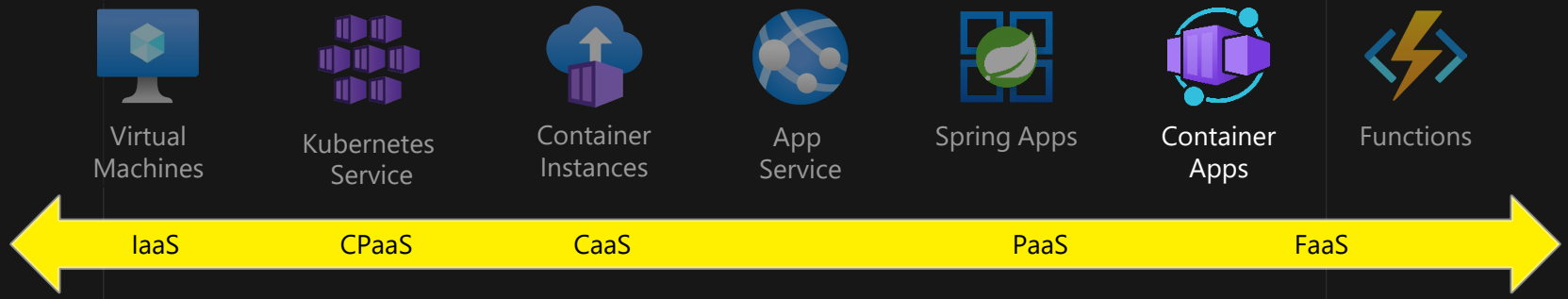
- What can you build with Azure Container Apps?
- What are the current limitations?

Why Container Apps?



How to build a Container App?

Provided:

- Managed Container Environment
- Zero downtime deployment
- Dapr / KEDA
- Log Analytics / App Insights

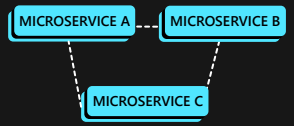
My responsibility:

- Building containerized application
- Container image
- Managing Secrets


```yaml
location: West Europe
name: aca-app-westeurope-001
properties:
  configuration:
    activeRevisionsMode: Single
    dapr: null
    ingress:
      allowInsecure: true
      external: true
      fqdn: aca-app-westeurope-001.thankfulwave-400e6f8b.westeurope.azurecontainerapps.io
      targetPort: 80
      traffic:
      - latestRevision: true
        weight: 100
      transport: Auto
    registries: null
    secrets: null
  managedEnvironmentId: ../Microsoft.App/managedEnvironments/aca-env-westeurope-001
  template:
    containers:
    - name: aca-app-westeurope-001
      image: mcr.microsoft.com/azuredocs/azure-vote-front:v1
      resources:
        cpu: 0.25
        ephemeralStorage: 1Gi
        memory: 0.5Gi
      env:
      - name: REDIS
        value: localhost
    revisionSuffix: firstrevision
    scale:
      maxReplicas: 3
      minReplicas: 1
      rules:
      - http:
          metadata:
            concurrentRequests: '10'
        name: http-requests
resourceGroup: rg-container-apps-demo-001
type: Microsoft.App/containerApps
```

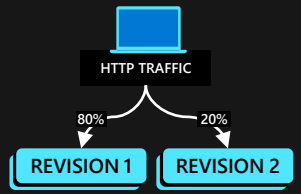
What can you build with Azure Container Apps?

Microservices



Microservices architecture with the option to integrate with Dapr

Public API endpoints



E.g., API app with HTTP requests split between two revisions of the app

Web Apps

E.g., Web app with custom domain, TLS certificates, and integrated authentication

Event-driven processing

E.g., Queue reader app that processes messages as they arrive in a queue

Background processing

E.g., Continuously running background process transforms data in a database

AUTO-SCALE CRITERIA

Individual microservices can scale independently using any KEDA scale triggers

Scaling is determined by the number of concurrent HTTP requests

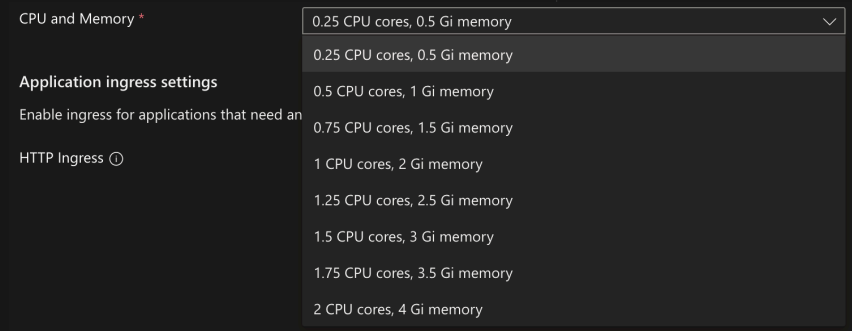
Scaling is determined by the number of concurrent HTTP requests

Scaling is determined by the number of messages in the queue

Scaling is determined by the level of CPU or memory load

What are current the limitations?

- Custom VNET requires CIDR /23 or larger
- Fixed Quotas
- UDR Support (In-Progress)
- 4GB memory limit per replica
- Custom metrics
- Router support
- E2E mTLS
- Terraform Support (In-Progresss)
- Azure Container Apps Roadmap
- Azure Container Apps - FAQ



Documentation

- Azure Container Apps documentation
- Deploy your first container app
- Azure Container Apps (github.com)